# Building Health Promotion into Health Care Reform in Russia

Disease prevention and health education must be built into the reformed health care system in order to promote public health for the Russian population

Stanley J. Tillinghast, M.D., M.P.A. and Valery E. Tchernjavsky, M.D., Ph.D., M.P.H.

## Out with the old...still waiting for the new

The health care system of the former Soviet Union, depite serious flaws, did, provide the basis for community health activities, and for mandatory immunization and periodic health examinations for which primary care physicians were responsible. Since 1991, a new system of mandatory health insurance has been put into place, with the majority of health care funding financed by a payroll tax and channeled through territorial funds. Private insurance companies are supposed to be the intermediaries between the funds and health care providers; in practice, this is not always the case. The providers of care, in most cases, remain the governmental hospitals and polyclinics (multispecialty group practices). Unlike the centrally planned and managed system of the Soviet period, the new system is decentralized, with a great deal of leeway for territorial experimentation. Decentralization, however, also has led to a breakdown in national public health efforts. Conversations with Russian health care leaders at the territorial (oblast) level indicate that the current situation has led for a number of reasons to less emphasis on community health. Health care funding has decreased substantially due to economic conditions; authority has shifted not only from the central to the oblast level, but also away from territorial health care committees to the funds and insurance companies. In the current climate, much of the Russian population seems to rebel against activities with authoritarian overtones. Yet there is not yet widespread acceptance either of the strong association between personal behavior and health consequences; nor of the importance of individual responsibility for one's health. Whether culturally ingrained, a result of social upheaval, or a holdover of the low morale of the last years of communism, alcohol and tobacco consumption remain at very high levels. Even among physicians, smoking is the norm for Russian men, and increasingly for young women as well. Our discussions about health-related behavior with Russian physicians have been greeted mostly with a fatalistic shrug of the shoulders.

## Actions have consequences: Health-related behavior and mortality from preventable diseases in the U.S. and Russia

Consistent with this view that the Russian population does not recognize the importance of health promotion is the trend toward increasing mortality from major conditions that could be amenable to changes in individual behavior. Mortality from these same conditions has been decreasing in the United States during the same period, and analyses have repeatedly suggested that these favorable trends are likely to be causally related to changes in the health-related behavior of the American population.

Between 1980 and 1992 the decline in heart disease mortality, begun in the 1970's, continued, decreasing by 29 percent for males and 24 percent for females. Lung cancer and chronic obstructive pulmonary disease deaths have remained stable for men, but have increased for women, consistent with increased smoking among women in past decades. Mortality from chronic liver diseases and cirrhosis have declined for both men and women; and motor vehicle deaths have fallen substantially for men, and remained stable for women.

Figure 1: Age-adjusted death rates per 100,000 population for selected causes of death by sex: United States and Russian Federation, selected years 1980-1993 (U.S., 1980-1992; Russia 1981-1993)

Vital and Health Statistics: Russian Federation and United States, Selected Years 1980-93. National Center for Health Statistics, DHHS Publication No. (PHS) 95-1485, 1995

In contrast, during approximately the same period (Russian Federation data are from 1981 to 1993), all these major causes of death have worsened for Russian men (motor vehicle accidents are not reported for earlier years). For Russian women, these conditions remained relatively stable, except for an increase in deaths from liver disease; heart disease mortality decreased until 1990-92, but increased again in 1993. Consistent with these trends, life expectancy at birth has decreased sharply for Russian men, from its peak of 64.5 years in 1990 to 59.0 in 1993. For women, life expectancy peaked at 74.3 in 1990-91, and fell to 71.5 in 1993. These decreases in life expectancy have occurred despite a fall in infant mortality of 31 percent from 1985 to 1993. Underlying social and psychological pathology can also be inferred from substantial increases in homicide and suicide rates in the 1990's in Russia. Suicides increased from 10.5 to 12.1 per 100,000 for women, and from 47.5 to 68.9 for men. Homicide increased even more dramatically, from 6.4 to 13.2 for women and from 22.4 to 47.5 for men.[1] Of course, the graphs in Figure 1 also demonstrate that heart disease, lung cancer, and COPD mortality for men were higher in Russia than in the U.S. even prior to the breakup of the Soviet Union. Not shown is the much higher rate of cerebrovascular disease mortality: for both men and women, the death rate was very high in 1981 (245.9 per 100,000) and increased further to 277.6. In contrast, total U.S. cerebrovascular disease mortality was 74.5 per 100,000 in 1980, and declined further to 48.1 in 1992. The U.S. decline is likely related largely to improved detection and treatment of hypertension.[2] While this is routinely treated with medication, health promotion can have a substantial effect on this condition by the encouragement of weight loss, increased exercise, and a healthier diet lower in fat and salt. Heavy alcohol consumption is also known to be a common cause of hypertension, and may have an effect on the high rate of hypertension and stroke in Russia.[3]

The past two decades in the United States have witnessed a remarkable increase in awareness of health-related behavior, with substantial decreases in smoking (except for those with lower educational status) and fat consumption, and increased exercise for a subset of the population. To take the example of cigarette smoking, social pressures to avoid smoking in the workplace and public places have increased. Restrictions on cigarette advertising on television appear to have been associated with a substantial decrease in smoking prevalence. Legislation in some states enforce smokefree environments in public areas. The state of California, in addition to strict legislation of this type, spends a large amount of cigarette tax revenues on anti-smoking media campaigns. Governmental and private regulations and education campaigns appear to be reinforcing the already-existing trend toward lower cigarette consumption. Of course, not all groups have been reached successfully by these efforts, as smoking among young women has continued to increase. In contrast, legal and social constraints on smoking in Russia are minimal. To our knowledge, only in McDonald's restaurant in Moscow is there a non-smoking section (indeed, McDonald's restaurants are smoke-free). It isvirtually unheard of to ask someone not to smoke, and rare for a smoker to ask permission before lighting a cigarette. This is as true in health care settings as in bars and restaurants.

Besides smoking, other behavior-related risk factors are important contributors to poor health in Russia. Russian consumption of fatty meats and dairy products is high, and alcohol consumption, at least among men, is prodigious. While heavy drinking appears to be an important part of expected behavior among men, frank alcoholism was recognized during the last years of the communist period as a major contributor to mortality, morbidity, and loss of productivity in the workforce. Once again, there appears to be no significant recognition in the medical community of this as a problem that can or should be dealt with. Meetings with physicians and administrators frequently begin with an offer of vodka or cognac, even in the morning.

With a far smaller number of automobiles and miles driven per person than in the United States, Russia has a higher death rate from motor vehicle accidents. Although there are stiff penalties for driving after consumption of any alcohol whatsoever, enforcement of this law is spotty. Likewise, seat belt use is mandatory for driver and front-seat passenger; this is enforced, but drivers frequently simply lay the slak seat belt across their lap to give the appearance that the belt is in place. Rear seat safety belts are seldom in place or usable. As with smoking and alcohol, Russian physicians do not serve as role models in regard to driving safety, and "aggressive"ãperhaps "lethal" would be more accurateãdriving behavior is almost universal (of note, the vast majority of drivers are men).

Immunization and Screening

In the area of immunization, another indicator of public health activity, there appears to have been a decline in prevalence of immunization for childhood diseases in parallel with the loss of central authority. Physicians we have spoken with report that the prior regulations that mandated universal immunization are no longer enforced, and that the population often responds poorly to attempts to cajole them into adherence with recommended immunization. Sporadic reportsãwhether true or not--of illness resulting from immunization may have contributed to the increase in diphtheria, no in epidemic proportions in some areas of Russia.
Screening for early detection of disease is another primary activity of preventive medicine. In the past, periodic health examinations were mandatory, with punishment for physicians whose patients did not comply. Again, in today's more liberal climate there has been a decrease in compliance with recommended screening. Screening interventions that depend on consumable supplies, such as mammographic film, are also subject to the chronic shortages related both to lack of funds and to lack of a stable source of supplies. Despite this, attempts are made to have women receive a Pap smear every year; and in many cases periodic tests are still recommended that have been dropped from most American practice, due to evidence of lack of benefit.

The same lack of careful attention to scientific evidence of benefit, as understood in current American medicine, is also seen in the continued widespread recommendations for rest cures in sanitaria. One renowned sanitarium in the Altai region is known specifically for its use of radon hydrotherapy. Prescription of such treatment appears to be waning as the former major users, large industrial complexes, are being forced to show profits. Nevertheless, uncritical acceptance of treatments based on "expert" authority appears to remain a major issue in Russian health care. In the United States, governmental activities health promotion are often only part of a larger effort that relies heavily on non-governmental organizations, and on cooperation between these first two parties and health care providers and insurers. The American Heart Association, American Cancer Society, Mothers Against Drunk Driving, and countless other non- profit organizations greatly increase the amount of educational material and media visibility of health promotion efforts. Health plans and providersoften compete to demonstrate their support for health promotion. Food processors contribute (albeit often inaccurately) in their advertising campaigns to the general awareness of health-related behavior. Such activities exist to a very small extent in Russia, but are overshadowed by major advertising promotions by American cigarette manufacturers, among others. In a time of great uncertainty, long-term health concerns are at the bottom of most peoples' priority lists.

Using Resources Wisely

The preventive medicine literature of the last twenty years in the United States has moved in the direction of careful evaluation of the scientific evidence of benefit and of cost-effectiveness analysis to compare the utility of different approaches to prevention and health promotion. These methodologies are used frequently in American and west European medical journals, and recommendations based on such scientific analysis have become part of the common vocabulary of practicing physicians and administrators responsible for developing perventive medicine and health promotion programs. Russian physicians andadministrators, on the other hand, continue tohave very little access to this literature. The limitations are largely related at present to language barriers (few Russian physicians speak English, the common language of medical science) and to financial constraints; in previous years, western medical literature was unobtainable mostly for political reasons.

In any case, our discussions with Russian physicians have repeatedly demonstrated a lack of knowledge of modern western medical literature. Interest in "modern" medicine seems to be confined largely to the desire to import the latest, most expensive diagnostic and therapeutic modalities. One example: a lipid clinic at one cardiology hospital routinely treats hypercholesterolemic patients with a statin, which costs as month per patient for one month as the average monthly salary. Niacin is rarely used, despite its greater cost-effectiveness and demonstrated benefit, because physicians are unfamiliar with its dosing requirements and need for gradual increase in dose.

In another example of lack of attention to cost-effectiveness analysis, a family practice clinic encourages women to come in for an annual Pap smear by a nurse, despite questions raised about the cost-effectiveness of this interval in American literature. The Pap smear cytology examinations, incidentally, are also done by the nurses. The idea of less frequent tests, with better quality interpretation by a cytological technician, does not appear to have been considered.

Overall, the picture in Russia is of the breakdown of a system that relied on centralized planning and administration, with enforcement of public health mandates through punitive enforcement measures, but that at least provided funding and coordination that encouraged immunization and similar efforts. That system has not yet been replaced by a more voluntary incentive system that encourages self-care, individual responsibility, and the involvement of non-governmental organizations.

To summarize, efforts at health promotion and disease prevention in Russia face numerous barriers:

- severe financial constraints due to the general economic situation
- social upheaval with loss of previous constraints on behavior
- cultural characteristics that include fatalism and encouragement of heavy alcohol and tobacco consumption
- lack of acceptance of individual responsibility for health
- lack of role modeling by the medical community
- lack of critical appraisal of benefit and cost-effectiveness for preventive interventions
- low priority to health care, and to prevention specifically

What is to be done?

For the foreseeable future, economic growth will be modest at best; therefore public health efforts will continue to be faced by severe financial constraints. Since there is little hope of substantial new injection of resources, much better use must be made of the resources available to public health authorities and the health care system. This requires a concerted effort to analyze costs and benefits of possible approaches, and setting priorities that are realistic. Ideally, financial incentives should be put into place that encourage health promotion by providers and payors. In place of the defunct system of centralized administration, new efforts to coordinate activities need to be implemented, so that a "critical mass" of intervention in a few key areas can be achieved. This would have the aim of increasing the visibility of health promotion through concerted campaigns focused on specific areas. This could take the form of contributions by providers to community efforts, or a set-aside mechanism form the mandatory health insurance fund for public health activities. To the extent possible, non-governmental health advocacy organizations should be encouraged, that might provide an alternative means of supporting community health promotion efforts. The new insurance mechanisms for health care financing should provide at the least a market-based competition to recruit members on the basis of their support of health promotion. In addition, attention should be paid to including contractual incentives that encourage the provision of clearly beneficial and cost-effective preventive interventions.

Setting Priorities

At the top of our list of new techniques to be introduced into the Russian health care system is expertise in critical review of medical literature, with particular emphasis on analysis of scientific evidence and cost-benefit and cost-effectiveness analysis.

Resources are always scarce, even in the United States where one-seventh of gross domestic product is spent on health care--in contrast with one percent of the vastly smaller Russian GDP. Russia can ill afford importing high technology that is of marginal usefulness while ignoring more beneficial, much less costly diagnostic and treatment tools. Careful review of evidence of benefit, comparing the benefits and costs of different interventions both to the health care system and to society at large (for example, in days of work lost by illness), and cost-effectiveness analysis to find less expensive ways to provide those interventions of proven benefit would greatly increase the health benefit for the resources used. There is some question as to whether Russians would accept such analyses if they demonstrated absence of benefit for many of their popular treatments, such as hyperbaric oxygen therapy. In addition, consumer expectations must be weighed to an increasing degree, particularly if the health care system does become more competitive. The benefits of such analysis also have to be weighed against a potential climate of distrust for anything that smacks of central planning. On the other hand, it should be pointed out that preventive interventions in particular are of no use unless they actually improve health outcomes; otherwse they merely

increase anxiety and waste resources. This has been the thrust of the preventive medicine literature of the past twenty years, culminating in the U.S. Preventive Services Task Force report of 1989. Yet another important criterion for inclusion of an intervention is that the burden of the disease on the population, in both health and financial terms, must be signficant enough to warrant the cost of intervention. Screening for rare diseases, for example, leads to far more false positive than true positive tests, with costly follow-up leading to anxiety for many, with very small potential benefit.

Even if a preventive intervention is effective, the appropriate interval for use must be a balance between cost and convenience, which argue for longer intervals, and safety and reassurance, which encourage shorter intervals. This analysis also must be informed by careful analysis: how rapidly does this disease progress? does screening every two years yield 98% of the effectiveness of annual screening, at 50% of the cost (as may be the case with cervical cancer screening)?

Innovative means of delivery

After interventions of proven benefit for conditions with a substantial burden of disease are chosen, and the most cost-effective interval determined (in practice, not such an easy task), the processes of care need to be examined to yield maximum result at minimum cost and inconvenience. Computerized tracking and reminder letters to patients; combining preventive screening with acute care visits; worksite screening: these and other innovative methods may improve adherence. Nor should one concentrate solely on early detection of disease (screening), at the expense of promoting changes in health-related behavior that could have an even greater benefit. Health education techniques of various types in use in the U.S. are scarcely known in Russia: dietary classes, smoking cessation programs, brochures, patient education videos are all potentially useful and highly cost-effective approaches that could be introduced. In analyzing processes of care, continuous quality improvement (CQI) techniques are of demonstrated benefit in improving efficiency. While doing so, however, the consumer or patient must be considered: waiting times, extra visits, increased anxiety are among the possible costs to consumers that need to be included in analyzing processes of care.

Incentives to Encourage Health Promotion

In the U.S., developments of the past few years have caused much greater attention to be given to cost-effectiveness in general, and to preventive services in particular, due to both internal and external stimuli. Capitation payments provide a strong incentive to health care providers to look for more cost-effecive ways to practice. Payors, meanwhile, have become much more sophisticated about their ability to use financial incentives to encourage providers to focus on cost-effective approaches. An example is the work of payor coalitions such as the Pacific Business Group on Health in bringing health plan and provider representatives together to reach agreement on recommended preventive services. Using as a basis the U.S. Preventive Services Task Force report of 1989, which used careful review of evidence of benefit for many proposed preventive interventions, the PBGH Health Services Advisory Committee (of which SJT was a member) approved a series of recommendations designed both to improve adherence to essential services and to distinguish the essential from the non-essential--and especially the useless--ones.

In the current Russian health care system, payors and consumers have much less choice of insurers and providers; therefore competition does not yet provide a strong incentive in most places to promote prevention to the public. This is not always the case: a progressive insurance company in one city rents the municipal swimming pool for certain hours, making it available exclusively to its members. The same company has begun producing simple patient education flyers as a marketing tool. If consumer awareness of health behavior can be raised by such competitive marketing, this might provide--at least eventually--a means of promoting health.

Another mechanism for increasing adherence to preventive measures being introduced in the U.S. is the use of indicators of quality of care that emphasize prevention. HEDIS 2.0 is a set of measurements provided in a standardized form by managed care plans to the National Commission on Quality Assurance. For example, one important indicator in HEDIS 2.0 is the percent of women health plan members 50-74 who have received mammography within the past two years. Health plans are now actively looking for ways to improve their measured levels of adherence, as purchasers of insurance begin to use such indicators to judge the quality of

preventive care. In Russia, the ZdravReform program, funded by the U.S. Agency for International Development, will introduce indicators of outpatient quality of care into participating ambulatory care clinics and practices. If successful in demonstration sites, these indicators could be used by consumers, purchasers, and insurers to compare providers, providing the same type of competitive pressure that has brought preventive medicine to the center stage of U.S. health care, rather than the periphery where it has languished in the past.

Another recent development in the U.S. has been contractual agreements between purchasers and health plans to return a portion of the funds paid to the health plan if it fails to meet stipulated improvements in performance, such as increasing adherence to Pap smear recommendations. While experience is limited with this approach, it has certainly gotten the attention of providers and insurers directed toward the areas where potential losses could be generated. Preventive measures again have been at the forefront in this approach, partly because the population in need can be well defined, and partly because there is strong evidence to support benefit.

Community Approaches to Health Promotion

Most of the above discussion has focused on prevention and health promotion activities carried on within the medical care system. In many cases, however, that is not the most appropriate or most efficient way of promoting health. If health promotion efforts are directed more broadly to the community at large, they may be more effective. Examples where this might be the case include immunizations (such as for influenza); seat belt usage promotion; dealing with occupational and environmental hazards; and school- or worksite-based educational campaigns. To the extent that desired activities are underfunded by the public health budget, it may be possible to redirect resources from providers into the public health sector. Alternatively, providers could cooperate to share their expertise in joint efforts. When clear-cut short-term benefits can be demonstrated--such as reducing absenteeism due to infectious diseasesãemployers might be persuaded to help fund health promotion activities such as community influenza vaccination, or water quality improvement.

The role of private organizations

One of the distinguishing features of American society in general is the breadth and variety of private, voluntary organizations that fill niches not occupied by the market or government. In the area of health, non-profit organizations at all levels raise money privately and use it for purposes of education, research, treatment, or advocacy. The success of such organizations is based largely on the altruism of individuals, but also encouraged by tax policies and other motivations. As a result of Russia's previous reliance on the state for all community needs, there is almost no such tradition in Russia today. There is, however, a rapid growth in some religions, particularly protestant churches, which may provide the foundation for charitable work; indeed, some American religious groups have already begun such work in many areas.

At present, the new Russians-- who have become wealthy in a very short time-- seem to feel little responsibility for sharing their wealth through philanthropy. Communist organizations such as Komsomol that provided some degree of community spirit have been discredited, and many Russians express a longing for their previous feeling of belonging to a community. If this longing can find expression through private associations directed toward the public good, this would be an extremely healthy development. Some thought might be given to encouraging American charities to develop Russian affiliates, teaching techniques of community organizing and fundraising. Americans have learned they can join together with others in their community for good even with those who do not share their religious faith, social status, or political affiliation. Linked in multiple webs of private associations, they weave a fabric of ommunity spirit. These social interactions of themselves provide healing for many who would otherwise be alone. This is not just a metaphor: strength of social bonds is afactor known to be associated with good health and long life. It helps give people a reason to live, and therefore a motivation to lead a healthy life. It is precisely this that is missing in Russia today. Pessimism, fatalism, alcoholism have seeped into the Russian psyche until a long life seems more a curse than a blessing. Alienated from their neighbors, afraid for the future, they turn to risk-taking behavior as an escape.

There is no single and no simple way out. Clearly, however, establishing a feeling of belonging--a sense of community--is one necessary and healthy step toward a brighter future.

1 Vital and Health Statistics: Russian Federation and United States, Selected Years 1980-93. National Center for Health Statistics, DHHS Publication No. (PHS) 95-1485, 1995

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